Abstract of Disclosure:

5

10

In a pre-process, a particle shape substance is decomposed and removed using a cyclone and an electric dust collection apparatus, NOx in an exhaust gas is decomposed completely using discharge, to establish technique for generating NO<sub>2</sub> for necessary to oxidize a particle shape substance in a real time. The generated NO<sub>2</sub> and ozone and active oxygen generated the particle shape substance is decomposed completely. NO<sub>2</sub> for necessary to the particle shape substance is generated and is processed in response to operation condition of an engine.

[Selection Figure] Fig. 1